

Section E. Infectious Diseases, Immune Disorders, and Nutritional Deficiencies

Overview

In This Section This section contains the following topics:

Topic	Topic Name
1	General Rating Principles for Infectious Diseases, Immune Disorders, and Nutritional Deficiencies
2	Tropical Diseases
3	Rheumatic Fever
4	Human Immunodeficiency Virus (HIV)-Related Illness
5	Chronic Fatigue Syndrome

1. General Rating Principles for Infectious Diseases, Immune Disorders, and Nutritional Deficiencies

Introduction This topic contains information about the general rating principles for infectious diseases, immune disorders, and nutritional deficiencies, including:

- definition of
 - infectious diseases
 - immune disorders, and
 - nutritional deficiencies
 - revisions of the infectious diseases, immune disorders, and nutritional deficiencies rating schedule
 - evaluations under the infectious diseases general rating formula, and
 - evaluating long-term health effects of 38 CFR 3.317 infectious diseases.
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Change Date

a. Definition: Infectious Diseases *Infectious diseases* are disorders caused by organisms, such as bacteria, viruses, fungi, or parasites.

Example: Malaria.

Note: Consider presumptive service connection (SC) for infectious diseases listed in

- [38 CFR 3.309\(b\)](#) based on tropical service
- [38 CFR 3.309\(c\)](#) based on confirmed FPOW status, and
- [38 CFR 3.317\(c\)](#) based on service in the Southwest Asia theater of operations during the Gulf War or on or after September 19, 2001, in Afghanistan.

References: For more information on presumptive SC for

- tropical diseases, see M21-1, Part IV, Subpart ii, 2.B.2.b
 - FPOW disabilities, see M21-1, Part IV, Subpart ii, 2.E, and
 - infectious diseases under [38 CFR 3.317](#), see M21-1, Part IV, Subpart ii, 2.D.
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b. Definition: Immune Disorders *Immune disorders* cause abnormally low activity or overactivity of the immune system. In cases of immune system overactivity, the body attacks and damages its own tissues (autoimmune diseases). Immune deficiency diseases decrease the body's ability to fight invaders, causing vulnerability to infections. Immune disorders can be caused by organisms, use of medications, or other chronic conditions.

Example: Systemic lupus erythematosus.

Note: Consider presumptive SC for immune disorders listed in [38 CFR 3.309\(a\)](#).

**c. Definition:
Nutritional
Deficiencies**

Nutritional deficiencies occur when the body is unable to obtain the necessary amount of a nutrient that is required for proper health. These deficiencies can be caused by diet, surgical residuals, genetics, environment, or other diseases.

Example: Beriberi.

Note: Consider presumptive SC for disabilities listed in SC [38 CFR 3.309\(c\)](#) based on based on confirmed FPOW status.

Reference: For more information on presumptive SC for FPOW disabilities, see M21-1, Part IV, Subpart ii, 2.E.

**d. Revisions of
the [Infectious
Diseases,
Immune
Disorders, and
Nutritional
Deficiencies](#)
Rating
Schedule**

The criteria for rating disabilities based on [infectious diseases, immune disorders, and nutritional deficiencies](#) in [38 CFR 4.88b](#) were most recently updated effective

- August 11, 2019, and
- August 30, 1996.

The purpose of these updates was to

- incorporate medical advances
- update medical terminology
- add disabilities not previously included, and
- refine rating criteria.

Note: These updates were not liberalizing changes in the rating criteria.

Reference: For more information on

- these and other historical changes to [38 CFR 4.88b](#), see
 - [38 CFR 4, Appendix A](#)
 - 38 CFR 4.88b (Historical), and
 - the [Board of Veterans Appeal Research Tools](#) website for historical [38 CFR 4.88b](#), and
 - effect of rating schedule readjustment, see M21-1, Part III, Subpart iv, 5.B.2.j.
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e. Evaluations Under the Infectious Diseases General Rating Formula

Prior to the August 11, 2019, rating schedule revision, each infectious disease listed under [38 CFR 4.88b](#) had its own prescribed rating criteria.

Effective August 11, 2019, [38 CFR 4.88b](#) contains a general rating formula applicable to multiple infectious diseases, regardless of etiology.

For each diagnostic code (DC) that refers to this general rating formula, decision makers must

- assign the prescribed evaluation during the active disease phase, and thereafter,
- assign
 - a 0 percent evaluation for the infectious disease under the relevant [38 CFR 4.88b](#) DC, and
 - evaluations for any residual disability of the infection within the appropriate body system as indicated by the notes in the evaluation criteria.

Notes:

- Regardless of whether resolution occurs spontaneously or because of treatment, long-term disability in such situations results from residual functional impairment of the body systems affected by the infectious disease, rather than the infection itself.
 - Infectious diseases for both the initial diagnosis and any relapse of active infection must be confirmed by diagnostic testing specific to the disease.
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f. Evaluating Long-Term Health Effects of 38 CFR 3.317 Infectious Diseases

As applicable, consider the long-term health effects potentially associated with infectious diseases as listed in [38 CFR 3.317\(d\)](#), specifically for brucellosis, *Campylobacter jejuni*, *Coxiella burnetii* (Q fever), malaria, *Mycobacterium tuberculosis*, nontyphoid *Salmonella*, *Shigella*, visceral leishmaniasis, and West Nile virus.

Reference: For more information on presumptive SC for infectious diseases under [38 CFR 3.317](#), see M21-1, Part IV, Subpart ii, 2.D.

2. Tropical Diseases

- Introduction** This topic contains information about tropical diseases, including
- specific tropical diseases
 - obtaining information about tropical diseases
 - incubation periods of tropical diseases, and
 - considering service connection (SC) for tropical diseases not of record.
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Change Date December 13, 2005

a. Specific Tropical Diseases The following tropical diseases, among others, may require attention in view of their incidence in areas of foreign service:

- bacterial infections, including
 - bacillary dysentery
 - cholera
 - Hansen’s disease (leprosy)
 - Oroya fever
 - pinta
 - plague
 - relapsing fever, and
 - yaws
- viral infections, including yellow fever
- roundworm parasitic infections, including
 - dracontiasis
 - filariasis (Bancroft’s type)
 - hookworm infection
 - loiasis, and
 - onchocerciasis, and
- other parasitic infections, including
 - amebiasis
 - blackwater fever
 - leishmaniasis
 - malaria, and
 - schistosomiasis.

Notes:

- Rate amebiasis and schistosomiasis under the digestive system.

- Rate pinta, verruga peruana (a late residual of Oroya fever), onchocerciasis, oriental sore, and espundia (Old World cutaneous and American (New World) mucocutaneous leishmaniasis) under diseases of the skin.

Reference: For more information on tropical diseases, see

- [38 CFR 3.307\(a\)\(4\)](#)
- [38 CFR 3.309\(b\)](#), and
- M21-1, Part IV, Subpart ii, 2.B.2.b, and
- M21-1, Part IV, Subpart ii, 1.I.2.

b. Obtaining Information About Tropical Diseases

An understanding of the locality, incubation period, and residuals of tropical diseases may be obtained from standard treatises.

Reference: For more information on tropical diseases, see [The Merck Manual of Diagnosis and Therapy](#).

c. Incubation Periods of Tropical Diseases

The table below contains the incubation periods of some tropical diseases.

Tropical Disease	Incubation Period
dracontiasis (Guinea worm disease)	14 months
filariasis, Bancroft's type	up to 8 to 12 months
kala-azar (visceral leishmaniasis)	up to one year
Hansen's disease (leprosy)	five years or more
loiasis, calabar swelling	three years
oriental sore, Old World cutaneous leishmaniasis	up to 18 months

d. Considering SC for Tropical Diseases Not of Record

When considering SC for tropical diseases *not* of record during service always

- consider tropical residence other than that during military service, and
- consult standard texts for disease factors, such as
 - locality of confinement
 - early symptoms
 - course of the disease, and
 - periods of incubation.

Reference: For more information on developing claims for SC for tropical diseases, see M21-1, Part IV, Subpart ii, 1.I.2.



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3. Rheumatic Fever

Introduction This topic contains information about rheumatic fever, including

- definition of rheumatic fever
 - complications of rheumatic fever
 - the prognosis of rheumatic fever, and
 - considering the effects of rheumatic heart disease.
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Change Date December 13, 2005

a. Definition: Rheumatic Fever Rheumatic fever is an acute, subacute, or chronic systemic disease that, for unknown reasons, is self-limiting or may lead to slowly progressive valve deformity of the heart.

Reference: For more information on evaluating rheumatic fever, see [38 CFR 4.88b, diagnostic code \(DC\) 6309](#).

b. Complications of Rheumatic Fever

Complications of rheumatic fever include

- cardiac arrhythmias
 - pericarditis
 - rheumatic pneumonitis
 - pulmonary embolism
 - pulmonary infarction
 - valve deformity, and
 - in extreme cases, congestive heart failure.
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c. Prognosis of Rheumatic Fever The prognosis is good in cases of rheumatic fever.

If the age of onset is post-adolescence, residual heart damage

- occurs in less than 20 percent of the cases, and
- is generally less severe than if the onset is during childhood.

Note: Mitral valve insufficiency is the most common residual.

d. Considering the Effects of For more information on the effects of rheumatic heart disease, see

- [38 CFR 4.104, DC 7000](#), and

**Rheumatic
Heart Disease**

- M21-1, Part III, Subpart iv, 4.G.1.g.
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4. HIV-Related Illness

Introduction This topic contains information about HIV-related illness, including

- definition of
 - HIV, and
 - AIDS
 - how HIV is diagnosed
 - definition of CD4 T cells
 - HIV transmission
 - definition of approved medication(s)
 - rating considerations for HIV-related illness, and
 - rating AIDS.
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Change Date

a. Definition: HIV *Human immunodeficiency virus* (HIV) is spread through body fluids that affect specific cells of the immune system, called CD4 cells, or T cells. Over time, HIV can destroy so many of these cells that the body cannot fight off infections and disease.

Reference: For more information on rating HIV, see

- [38 CFR 4.88b](#), and
 - M21-1, Part III, Subpart iv, 4.E.4.g.
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b. Definition: AIDS *Acquired immunodeficiency syndrome* (AIDS) is a secondary infection and results from HIV infection. It is not a single distinct disease, but rather a disorder characterized by a severe suppression of the immune system, rendering the body susceptible to and unable to fight off a variety of normally manageable infections, cancers, and other diseases.

Patients with AIDS suffer infections called “opportunistic” because they take the opportunity to attack when the immune system is weak. This may involve the intestinal tract, lungs, brain, eyes and other organs, as well as debilitating weight loss, diarrhea, and neurologic conditions.

Important: If a Veteran has HIV and one or more of the following opportunistic infections, regardless of the CD4 (T4) count, the Veteran is considered to have a diagnosis of AIDS:

- candidiasis of the bronchi, trachea, esophagus, or lungs
- invasive cervical cancer
- coccidioidomycosis

- cryptococcosis
- cryptosporidiosis
- cytomegalovirus (particularly CMV retinitis)
- HIV-related encephalopathy
- herpes simplex-chronic ulcers for greater than one month, or bronchitis, pneumonia, or esophagitis
- histoplasmosis
- isosporiasis (chronic intestinal)
- Kaposi's sarcoma
- lymphoma
- mycobacterium avium complex
- tuberculosis
- pneumocystis jirovecii (*carinii*) pneumonia
- pneumonia, recurrent
- progressive multifocal leukoencephalopathy
- salmonella septicemia, recurrent
- toxoplasmosis of the brain, and
- wasting syndrome due to HIV.

References: For more information on

- rating AIDs, see
 - [38 CFR 4.88b](#)
 - M21-1, Part III, Subpart iv, 4.E.4.h
 - HIV/AIDS residuals, see [HIV Basics | HIV/AIDS | CDC, and](#)
 - HIV/AIDS tests and treatment options, see [VA HIV/AIDS](#).
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c. How HIV Is Diagnosed

HIV is primarily detected by testing a person's blood for the presence of antibodies (disease-fighting proteins) to HIV. Two antibody tests ELISA (enzyme-linked immunosorbent assay) and Western blot assay (a confirmatory test) are used. An alternative test, IFA (indirect immunofluorescence assay), may also be used.

The ELISA and Western blot may be negative for as long as three to six months after exposure to HIV.

If a person is highly likely to be infected with HIV, but both tests are negative, a test for the presence of HIV itself in the blood may be done.

d. Definition: CD4 T Cells

A *CD4 T cell* is a type of lymphocyte, the white blood cell that bears the major responsibility for the activities of the immune system. The other major type is the B cell. Together, they fight off invading viruses, bacteria, parasites, and fungi. The "T4," "helper-T," or "CD4" cell helps regulate and direct immune activity.

Notes:

- A healthy, uninfected person has 800-1200 (or 500 to 1500 by some references) CD4 T cells per cubic millimeter of blood.
 - During HIV, the number of these cells in the blood progressively declines.
 - When the count falls below 200, the person is vulnerable to the opportunistic infections and cancers that typify AIDS.
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**e. HIV
Transmission**

Major means of HIV transmission are

- sexual contact
- infected blood, and
- needle stick accidents.

Notes:

- No evidence exists that HIV is transmitted through
 - saliva, sweat, tears, urine, or feces
 - casual contact such as the sharing of food utensils, towels and bedding, swimming pools, telephones, or toilet seats, or
 - biting insects such as mosquitoes, flies, ticks, fleas, bees, wasps, or bedbugs.
- If there is evidence indicating that the HIV-related illness was the result of intravenous drug abuse, ensure that the authorization activity has conducted a Line of Duty/Willful Misconduct administrative decision prior to rating.
- There is no presumptive SC provision for HIV. Veterans must establish SC under other provisions, such as direct SC under 38 CFR 3.303 by establishing an in-service event, injury, or disease as the cause of HIV.

References: For more information on

- willful misconduct and line of duty determinations, see M21-1, Part III, Subpart v, 1.D, and
 - establishing direct SC, see M21-1, Part IV, Subpart ii, 2.B.1.
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**f. Definition:
Approved
Medication(s)**

When rating an HIV case, the term *approved medication(s)* includes treatment regimens and medications prescribed as part of a research protocol at an accredited medical institution.

**g. Rating
Considerations
for HIV**

When evaluating HIV-related illness, consider

- severity and frequency of constitutional symptoms
- use of approved medication(s)
- T4 cell count, and
- the development of AIDS-related opportunistic infection or neoplasm.

Notes:

- Only patients with HIV who are asymptomatic should be rated at 0 percent.
- An evaluation of 30 percent should be the minimum if there are recurrent constitutional symptoms, even if they have responded to appropriate treatment.
- In rating HIV, consider the following:
 - rating may be based on [38 CFR 4.88b, DC 6351](#) criteria, or
 - separate evaluations may be warranted under the appropriate diagnostic codes if other defined conditions due to HIV infection or its treatment develop. This could include psychiatric illness, central nervous system manifestations, opportunistic infections, and neoplasms.

Examples:

- Enlarged lymph nodes and fatigue (HIV-related constitutional symptoms) warrant a 10 percent; however, if pelvic inflammatory disease (PID) or other symptoms develop, the evaluation could go to 30 percent if the symptoms go into remission and then reoccur (recurrent symptoms) or 60 percent if they do not respond to treatment (refractory symptoms).
- If there is a CD4 count of 400, the Veteran is on HAART, and there are symptoms of depression but no other significant signs or symptoms of the infection or its treatment, it would be appropriate to assign 10 percent. However, if the depression rises to the level of a diagnosed major depression or dysthymic disorder, consider evaluating it separately as a secondary condition, with the potential of a higher rating. The HIV infection would still warrant a 10 percent evaluation under [38 CFR 4.88b, DC 6351](#), based on findings not related to symptoms of depression—low CD4 count and treatment.

Reference: For more information on avoidance of pyramiding, see

- 38 CFR 4.14
- *Esteban v. Brown*, 6 Vet.App. 259 (1994), and
- M21-1, Part III, Subpart iv, 5.B.2.b.

**h. Rating
AIDS**

Once a Veteran develops AIDS, evaluate the specific findings based on the table below.

In instances of ...	Note that ...
opportunistic infections	<ul style="list-style-type: none">• once an AIDS-related opportunistic infection or neoplasm appears, the rating will be 60 percent or above• many of the opportunistic infections will warrant a 100 percent evaluation, at least for a time (TB, lymphoma, etc.), and

	<ul style="list-style-type: none"> • special monthly compensation (SMC) will be a frequent consideration.
cancer	it should be rated separately, if advantageous to the Veteran, as long as its symptomatology is not also used to support a 60 or 100-percent evaluation under DC 6351.
episodic problems	<ul style="list-style-type: none"> • the possibility exists that a particular examination may have been done at a time between episodes of opportunistic infections when findings are relatively few, and • the overall history for the past year or so should be considered when rating, since some AIDS complications can be episodic.

References: For more information on,

- rating evaluations, see [38 CFR 4.88b Schedule of Ratings-Infectious Diseases, Immune Disorders and Nutritional Deficiencies](#)
 - treatment options, see
 - [HIV Basics | HIV/AIDS | CDC](#)
 - [VA HIV/AIDS](#), and
 - [Medical EPSS](#).
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5. Chronic Fatigue Syndrome

Introduction This topic contains information about chronic fatigue syndrome, including

- definition of chronic fatigue syndrome, and
- rating considerations for chronic fatigue syndrome.

Change Date

a. Definition: Chronic Fatigue Syndrome *Chronic fatigue syndrome* is a complex, multisymptom, debilitating illness characterized by physical and mental manifestations.

b. Rating Considerations for CFS When rating a chronic fatigue syndrome case, keep in mind that a diagnosis requires the following:

- new onset of debilitating fatigue severe enough to reduce daily activity to less than 50 percent of the usual level for at least six months, and
- the exclusion, by way of a thorough evaluation, of all other clinical conditions that may produce similar symptoms based on history, physical examination, and laboratory tests.

In addition, six or more of the following criteria must be met:

- acute onset of the condition
- low grade fever
- sore throat with no secretions (nonexudative pharyngitis)
- palpable or tender cervical or axillary lymph nodes
- generalized muscle aches or weakness
- fatigue lasting 24 hours or longer after exercise
- headaches (of a type, severity, or pattern that is different from headaches in the pre-morbid state)
- migratory joint pains
- neuropsychological symptoms, and
- sleep disturbance.

Note: Consider presumptive SC for chronic fatigue syndrome as a medically unexplained chronic multisymptom illness under [38 CFR 3.317\(a\)](#).

Reference: For more information on chronic fatigue syndrome, see

- [38 CFR 4.88a](#)

- [38 CFR 4.88b](#)
 - [Medical EPSS](#), and
 - M21-1, Part IV, Subpart ii, 2.D.1.i.
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